

ABSTRACT OF THE DISCLOSURE

A semiconductor device includes: a lower hydrogen-barrier film; a capacitor formed on the lower hydrogen-barrier film and including a lower electrode, a capacitive insulating film, and an upper electrode; an interlayer dielectric film formed so as to cover 5 the periphery of the capacitor; and an upper hydrogen-barrier film covering the top and lateral portions of the capacitor. An opening, which exposes the lower hydrogen-barrier film where the lower hydrogen-barrier film is located around the capacitor, and which is tapered and flares upward, is formed in the interlayer dielectric film, and the upper hydrogen-barrier film is formed along the lateral and bottom faces of the opening, and is in 10 contact with the lower hydrogen-barrier film in the opening.